## ABSTRACT OF DISCLOSURE

The present invention relates a method for oxidation of an aromatic compound having an alkyl substituent, including reacting the aromatic compound having an alkyl substituent with an oxygen molecule to oxidize the alkyl substituent into an aldehyde group in the presence of a catalyst containing Ag and/or Au, and, if necessary, any one or more kinds of group VIII elements, supported on a carrier. The oxidation method of the present invention allows the production of an aromatic aldehyde compound or an aromatic carboxylic acid ester via this aromatic aldehyde compound in high yield and in high selectivity by the use of a catalyst having moderate oxidizing ability, even when an aromatic compound having an alkyl substituent, which is easily converted into an aromatic carboxylic acid by oxidation, is used as a starting material.